MAMONTOV, C. V.

"Calculation of the Transient Processes in Complicated Linear Circuits by Means of the Fourier Integral."

Dissertation for the Degree of Candidate of Technical Sciences, defended at Institute for Power Engineering imeni Krzhizhanovskiy AS USSR, 17 September 1953, (Elektrichestvo, 1953, Nr 4, 96-97).

9(2) SOV/143-58-10-4/24

AUTHOR: Mamontov, O.V., Engineer

TITLE: A Transistorized Power Direction Control Unit

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Energetika, 1958, Nr 10, pp 26-28 (USSR)

ABSTRACT: Power direction control units are used in a number of relay protection devices for power distribution networks. In high-frequency directional protectors they are basic elements. The power direction in an electric transmission line is determined by measuring the phase angle between the current and the voltage. The development of electronic protectors requires suitable units built of electronic elements. A transistorized power direction control unit may be used for measuring the phase angle between two sinusoidal voltages. A similar principle was previously used by the author for this purpose in a high-frequency differential-phase protector [Ref 1]. A coincidence circuit (logic circuit AND, shown in Figure 1) may be used for this purpose. Two sinusoidal voltages having the same fre-

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quencies are fed to the two circuit inputs. The average voltage value at the circuit outlet U_{av} will be proportional to the phase angle φ between these voltages: $U_{av} = k\varphi$. The phase angle may be determined by measuring the outlet voltage. A simplified principal circuit with two transistors is shown in figure 2. The sinusoidal voltages U_1 and U_2 are fed thru two matched transformers to the transistor bases. At the circuit outlet a one-sided, periodic sequence of negative, rectangular pulses having the feed voltage frequency (50 cycles) is obtained. The width of the rectangular pulses α depends on the phase angle φ between the voltages U_1 and U_2 in the following way: $\alpha = 180^0 - \varphi$. The dependence of the average voltage value at the circuit outlet from the angle φ is shown in figure 3. An additional phase shift between the voltages may shift the angular characteristics. A similar measuring circuit may be used as a separate unit in an electronic protector or it may be used for building a power direction relay. A simplified basic

circuit of a power direction relay, built on the aforementioned principle, as shown in figure 3. Here an additional phase shifting circuit is used. The relay starts operating when the current phase in the current transformer is shifted by 180°, since such shifts occur during failures. The angular characteristic of the relay is shown in figure 4. The characteristic corresponds to a setting for operation equal to 100°. The relay contain three P-6 transistors and one P-3. A 24-volt MKU-48 output relay with an operating current of 35 milliamps was used. The aforementioned relay was successfully tested the the Laboratoriya upravlyayushchikh mashin i sistem AN SSSR (Laboratory of Control Machinery and Systems of the AS USSR). T.F. Sosina participated in this work. Some creep of the operating characteristic (up to 5°-8°) was observed, caused by temperature and other factors. There are 1 block diagram, 2 circuit diagrams, 2 graphs

A Transistorized Power Direction Control Unit SOV/143-58-10-4/24

and 1 Soviet reference.

ASSOCIATION: Laboratoriya upravlyayushchikh mashin i sistem AN SSSR (Laboratory of Control Machinery and Systems of the AS USSR)

SUBMITTED: July 17, 1958

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MAMONTOV, O.V., kand.tekhn.nauk

Phase-differential high-frequency protection equipped with crystal triodes. Elek.sta. 29 no.5:64-66 My '58. (MIRA 12:3)
(Electric cutouts) (Transistors)

MAMONTOV, O.V., kand.tekhn.nauk

High-output transceiver for high-frequency protection. Elek.sta. 29 no.8:53-55 Ag '58. (MIRA 11:11)
(Electric power distribution--High tension)

MAMONTOV, O.V.

PHASE I BOOK EXPLOITATION SOV/3671

Akademiya nauk SSSR. Institut elektronnykh upravlyayushchikh mashin

Tsifrovaya tekhnika i vychislitel'nye ustroystva; [Sbornik]
(Digital Technique and Computing Devices; Collection of Articles)
Moscow, Izd-vo AN SSSR, 1959. 184 p. Errata slip inserted.
4,000 copies printed.

Ed.: M.S. Bruk, Corresponding Member, USSR Academy of Sciences;
Ed. of Publishing House: O.Yu. Shteynbok; Tech. Ed.: V.V.
Volkhova

PURPOSE: This collection of articles is intended for persons specializing in computer technique.

COVERAGE: Most of the work in this first issue of the Collection of Articles of the Institute of Electronic Control Machines of the Academy of Sciences, USSR, was carried out during 1958-1959. The Academy of Sciences, USSR, was carried out during 1958-1959. The Institute conducted studies allied to digital technique. The Institute conducted studies aimed at creating a high-speed memory device of large capacity. One of the results of this work was improvement of the M-2 computer by replacing its static storage device with ferrite memory cores. Other articles concern the use of transistors in digital computers, stability and the use of the M-2 computer in solving various problems. Future issues of this collection of articles will present the results of work in digital technique in mathematical investigations and in control machines and systems of control which operate on the principle of digital technique. Some personalities are mentioned in the articles. References accompany some of the articles.

Colombo, E.B. Solving Problem [illegible] Electronic Computers

9(2) SOV/143-59-3-4/20

AUTHOR: Mamontov, O.V., Candidate of Technical Sciences

TITLE: A Transistorized Pulse Element for Power Direction Control (Impul'snyy organ napravleniya moshchnosti na kristallicheskikh triodakh)

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy - Energetika, 1959, Nr 3, pp 28-31 (USSR)

ABSTRACT: The author describes a transistorized relay for power direction control. The basic component, the pulse element, is a coincidence circuit (logical system AND). Its circuit diagram is shown in figure 2. The element determines the phase relations between two sinusoidal voltages; one U_1, is proportional to the line current, while U_2 is proportional to the voltage. Using one of the given voltages, for example U_1, negative pulses are shaped in such a way that they coincide with the zeros of this voltage during its increase, i. e. at $\frac{dU_1}{dt} > 0$. The pulses pass thru the resistor

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R_1 and enter the collector of the transistor, which is normally closed, and are cut off. The sinusoidal voltage U_2 is applied at the transistor base which effects a blocking of the transistor upon passage of a positive half-wave. The transistor is opened when a negative half-wave passes. A pulse at the circuit outlet will appear only in case it coincides in time with the positive half-wave of the voltage U_2. As long as power is flowing from the bases into the line, the pulses will coincide with the negative half-wave voltage at the base of the transistor and will be cut off. When the power direction changes, i.e. when the power flows from the line to the bases, the pulses will coincide with the positive half-wave, enter the transistor collector at the moment when it is blocked and will proceed to the circuit outlet. In this way, pulses will appear at the circuit outlet only in case the direction of the power flow is changed. A relay for controlling the power direction was developed on the principle of the aforementioned circuit. Its block

diagram is shown in figure 3 and its circuit diagram in figure 4. It consists of a phase-shifting circuit, a pulse-shaping circuit, a logical circuit "AND", a trigger and the MKU-48 outlet relay. Transistors P3, P4, etc may be used for the trigger, while transistors P6 were selected for the other circuits. In the phase-shifting circuit, the voltage U_1 is being shifted additionally for providing optimum phase ratio. The angular characteristic of the power direction relay is a dependence between the current at the outlet relay and the phase shift between the voltages U_1 and U_2, as shown in figure 5. As long as the phase angle will remain within the limits of $\pm 90^{\circ}$, there will be no current flowing thru the relay. In case the phase angle is greater than 90°, the relay current will change suddenly. The functioning time of the electronic part of the relay is determined by the number of comparisions within one cycle. It does not exceed one cycle of industrial frequency. Analoguously a comparison

may be performed during each half cycle. In this case, the operating time is shortened twice, but the circuits will be more complicated. The relay was tested at the Laboratory of Control Machinery and Systems of the AS USSR under participation of T.F. Sosina. There are 2 block diagrams, 2 circuit diagrams, 1 graph and 2 Soviet references.

ASSOCIATION: Laboratoriya upravlyayushchikh mashin i sistem AN SSSR (Laboratory of Control Machinery and Systems of the AS USSR)

SUBMITTED: July 17, 1958

8(6) SOV/105-59-5-2/29

AUTHOR: Mamontov, O. V., Candidate of Technical Sciences

TITLE: Computation of Transition Processes in Complex Three-phase Circuits With Rotating Machines (Raschet perekhodnykh protsessov v slozhnykh trekhfaznykh tsepyakh, soderzhashchikh vrashchayushchiyesya mashiny)

PERIODICAL: Elektrichestvo, 1959, Nr 5, pp 5-9 (USSR)

ABSTRACT: The method of computing the transition processes in circuits with rotating electric machines with smooth rotor and "distributed" winding is described here. The method is based on the application of the Fourier integral. The rotor symmetry existing in these machines facilitates very much the computation, but if the wiring to be computed contains circuits with "distributed" (raspredelennyy) and concentrated (sosredotochennyy) constants, the transition process is expressed by a great number of differential equations. This system of equations can be solved according to the method of the Fourier integral. The important advantage of this method is the possibility of reducing the computation of the transition processes to an analysis of all stabilized working processes. Therefore, a computer board

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can be used for computing transition processes in complex circuits. The equation of the transition process is indicated in the form of (1), and the reaction of the system on the effect of the disturbance is indicated in the form of a sine function (2). Formula (2) is solved by formulas (3) and (4), respectively (Ref 9). Because of the mechanical shifting of the rotor windings with reference to the immovable stator winding with an angular velocity Ω, the matrix of the transition-process equation becomes asymmetrical. For an induction motor with short-circuited rotor, for instance, it has the form of formula (6). The fact that terms with $p \pm j\Omega$ appear in the equations of the transition processes effects that the real and imaginary parts of the amplitude-phase-frequency characteristic show no symmetry in wirings with rotating machines (in contrast to wirings with only passive elements): formulas (7). Therefore, it is necessary to determine the frequency characteristic both for positive and negative frequencies. Because of the asymmetry of the frequency characteristic, the required integrals are determined in formulas (3) and (4), separately for positive and negative frequencies.

Computation of Transition Processes in Comple-. Three-phase Circuits With Rotating Machines

Thus, the problem to be solved is the determination of the integrals in (8) and (9). The computation of these integrals is very difficult in an analytic way. Therefore, they are computed by approximation of the step function (Ref 9) of the real (or imaginary) frequency characteristic obtained on the computer board. Formulas (8) and (9) are represented in form of (11) and (12), respectively. The frequency characteristic of a complicated circuit can be determined with the computer for alternating current. The characteristics caused by the presence of the rotating machines are pointed out for obtaining the frequency characteristic.- To be able to compare the results of a computation of transition processes according to the method of the Fourier integral with the results of computation by the exact (operator) method, 2 relatively easy problems are calculated here as examples in the appendix. There are 5 figures and 9 Soviet references.

ASSOCIATION: Institut elektronnykh upravlyayushchikh mashin AN SSSR (Institute of Electronic Control Machines of the AS USSR)

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S/105/60/000/002/001/003
E041/E421

AUTHORS: Lion, G.Ya., Engineer, Mamontov, O.V., Candidate of Technical Sciences and Fomicheva, I.I., Engineer

TITLE: Electronic Differential Phase Protection Using Semiconductor Elements

PERIODICAL: Elektricheskiye Stantsii, 1960, 31 No.2, pp.72-75

TEXT: The principle of the protective system is as follows: A narrow (0.2 to 0.3 microsec) pulse sent into a transmission line is used to cancel out the pulse reflected from the far end. An experimental version of the system has been working continuously since 1958 on a 220 kV line. Over a period of 450 days since July 1959, the installation has been tested over 400 times without a failure. During this time the receiver bandwidth has remained constant although its centre frequency has drifted slightly. This was traced to the ferrite cores used. The behaviour of this new protective system was compared with another parallel system ДФЗ-2 (DFZ-2) and found satisfactory. On two occasions, the system operated from one end of the line. In one case this was due to a difference in sensitivities of two circuits in the other

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S/104/60/000/002/001/003
E041/E421

Electronic Differential Phase Protection Using Semiconductor Elements

because one circuit was still in a recovering condition. Transistors type П1, П2, П3 and П6 (P1, P2, P3 and P6) are used. A P1 failed after 1500 hours, a P3 after 4780 hours. There are 46 germanium diodes in the system, all type ДГ-Ц24 (DG-Ts24); none have failed. There are 28 devices using ferrite cores types СБ-1 (SB 1), СБ-5 (SB 5) and Ш-7 (Sh-7). It is concluded that Soviet transistors have yet to prove themselves suitable for use in protective systems. The results of laboratory tests were presented at a joint meeting of the Relay Protection Section MO NTOFP and the Long Distance Transmission Commission of the Power Engineering Institute AS USSR (Komissii dal'nykh peredach pri Energeticheskom institute AN SSSR) in 1956. There are 2 tables and 5 Soviet references.

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MAMONTOV, Oleg Vasil'yevich; FILARETOVA, A.S., red.; SHIROKOVA, M.M., tekhn. red.

[Methods of cybernetics in the theory of electronic protective relays] Metody kibernetiki v teorii elektronnykh releinykh zashchit. Moskva, Gosenergoizdat, 1962. 295 p. (MIRA 15:7)
(Cybernetics) (Electronic control)

S/105/62/000/002/001/002
E140/E463

AUTHOR: Mamontov, O.V., Candidate of Technical Sciences (Moscow)

TITLE: The perspectives of cybernetics applications in the theory of relay protection of power networks

PERIODICAL: Elektrichestvo, no.2, 1962, 6-10

TEXT: The author analyses the general scheme of a relay protection system to demonstrate that it too corresponds to the generalized closed-loop control system studied in cybernetics. There is the controlled object, sensitive organs (receptors), principal organs (program for determining causes or locations of faults and for defining the program of protection) and executive organs (circuit breakers etc). The controlled object is itself nowhere defined. After relating these parts of a relay protection system to the principal concepts of cybernetic control systems the author draws some conclusions. He mentions that: cybernetics permits classification of protection system and generalized methods of analysing them; information theory permits study of signal/noise relations in the transmission of information within the system; game theory permits the protection and the power system to be conceived as opponents and the optimal system

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determined. There are 3 figures and 7 references: 6 Soviet-bloc and 1 non-Soviet-bloc. The reference to an English language publication reads as follows: Ref.6: Wiener N., The extrapolation, interpolation and smoothing of stationary time series, 1949, N 9.

SUBMITTED: April 19, 1961

Card 2/2

MAMONTOV, P.P.

Possibility of introducing motion pictures in long-range weather forecasting. Nauch.dokl.vys.shkoly; geol.-nauki no.4:106-107 '58. (MIRA 12:6)

1. Moskovskiy universitet, kafedra uchebnoy i nauchnoy fotografii i kinematografii.

(Weather forecasting)
(Motion pictures in meteorology)

MAMONTOV, R.R., inzh.

Wintertime maintenance and repair of tracks and ballast work.
Put' i put.khoz. no.12:7-11 D '57. (MIRA 10:12)
(Railroads--Maintenance and repair) (Ballast (Railroads))

DOROSHEVICH, Anatoliy Titovich; TYURIKOV, Aleksandr Afanas'yevich; MAMONTOV, Roman Romanovich; POTOTSKIY, G.I., red.; BOBKOVA, Ye.N., tekhn.red.

[Track maintenance on roads carrying heavy loads; work practices of the Kalachinsk section of the Omsk Railroad] Soderzhanie puti v usloviiakh vysokoi gruzonapriazhennosti; opyt raboty Kalachinskoi distantsii puti Omskoi dorogi. Moskva, Vses.izdatel'sko-poligr. ob"edinenie M-va putei soobshcheniia, 1960. 47 p.
(MIRA 13:9)

(Railroads--Maintenance and repair)

MAMONTOV, S.D., aspirant

Production of sand-lime materials from the sands of Gorkiy Province. Trudy GISI no.47:71-84 '64. (MIRA 18:11)

PHASE I BOOK EXPLOITATION SOV/4556

Ayzenberg, B.I., Engineer, B. M. Kleymenov, Engineer, S.K. Mamontov, Engineer, B.M. Meyl'man, Engineer, Ya. S. Mindlin, Engineer, A.M. Palant, Engineer, and Ye. S. Yampol'skiy, Engineer

Proyektirovaniye mashinostroitel'nykh zavodov; spravochnoye posobiye po organizatsii i metodike proyektirovaniya (Planning of Machine-Building Plants; Reference Book on the Organization and Methods of Planning) Moscow, Mashgiz, 1960. 379 p. Errata slip inserted. 13,000 copies printed.

Ed.: B.I. Ayzenberg, Engineer; Reviewer: I.S. Zotov, Engineer; Ed. of Publishing House: V.I. Yakovleva; Managing Ed. for Information Literature; I.M. Monastyrskiy, Engineer; Tech. Ed.: Z.I. Chernova.

PURPOSE: This book is intended for engineers and technicians engaged in planning machine-building plants.

COVERAGE: The authors discuss problems in the organization of planning machine-building plants. Included is information on the makeup of planning organizations, development of documentation, selection of construction site, investigations of plants to be reconstructed, preparation of planning, examination and

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approval of documentation, and mechanization of calculations and drafting. Definition of principal concepts are given and the contents of the planning documentation are discussed. No personalities are mentioned. References accompany two chapters.

TABLE OF CONTENTS:

MAMONTOV, S.V., inzh.

Effect on the inertia of a safety valve on the operating stability of a hydraulic mine support. Nauch. soob. IGD 11: 84-102 '61. (MIRA 16:4)

(Mine timbering)

MAMONTOV, S.V.

Fatigue life of a rubber stretchable ballon in hydraulic props.
Fiz.-mekh.svois.,dav.i razr.gor.porod no.1:221-226 '62. (MIRA 16:3)
(Mine timbering)

MAMONTOV, S.V.

Studying the manifestation of rock pressure when testing combined hydraulic props. Fiz.-mekh.svois.,dav.i razr.gor.porod no.1: 162-176 '62. (MIRA 16:3)

(Mine timbering) (Rock pressure)

MAMONTOV, V.

Let's finish with amateurism. Prof.-tekh.obr. 19 no.3:28-29 Mr '62. (MIRA 15:4)

1. Starshiy master uchebnogo kombinata tresta "Kazmetallurgstroy", g. Temir-Tau.
(Building trades--Audio-visual aids)

MAMONTOV, V. (Temir-Tau)

To check means to help. Prof.-tekhn.obr. 19 no.11:29 N '62.
(MIRA 16:2)

1. Starshiy inzh. proizvodstvennogo obucheniya Uchebnogo kombinata tresta Kazmetallurgstroy.
(School supervision)

MAMONTOV, V., inzh. tekhnicheskogo obucheniya

Planning and visual aids in the training of assemblers. Prof.-tekh. obr. 21 no. 8:26-28 Ag '64. MIRA 17:9

1. Uchebnyy kombinat tresta Kazmetallurgstroy Karaganinskoy obl.

1. MAMONTOV, V. A.

2. USSR (600)

4. Fruit Culture - Ryazan' Province

7. Organization of large-scale commercial fruit growing in Ryazan' Province. Sad i og. no. 9, 1952.

9. Monthly List of Russian Accessions, Library of Congress, January, 1953. Unclassified.

SOV-120-58-3-31/33

AUTHORS: Korotenko, B. G., Gridneva, I. A., [illegible]

TITLE: Application of Inductive "Contacts" in the [illegible] of Mechanical Quantities (Primeneniye induktsionnogo [illegible]"yema pri izmerenii mekhanicheskikh velichin)

PERIODICAL: Pribory i Tekhnika Eksperimenta, 1958, Nr 3, [illegible] (USSR)

ABSTRACT: Normally, slip-rings are used in the measurement of mechanical quantities on rotating parts of machines. In order to remove errors associated with this technique, the authors have developed a method whereby the energy from the rotating specimen is transmitted to the fixed [illegible] device through an inductive coupling. The system is based on a transformer element, the primary of which is attached to the moving element and rotates with it, and the second-ary is stationary and attached to the measuring apparatus. The mechanical details are shown in Figs. [illegible] and the electronic circuit in Fig. 1. The fixed [illegible] is connected to a two-stage amplifier. The coil [illegible] are such that the transformer characteristic is [illegible] in

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SOV-120-58-3-31/33

Application of Inductive "Contacts" in the Measurement of ... Quantities

the region 50 - 15 000 c/s. Experi... an inductive "contact" is convenient and ... There are 3 figures and 5 Soviet references.

ASSOCIATION: Khar'... Highway Institute)

SUBMITTED: July ..., 1957.

1. Machines--Performance 2. Machines--Testing equipment 3 Electrical equipment--Design 4. Electronic circuits--Applications

Card 2/2

TKACH, F.F. (Novokuznetsk Kemerovskoy obl.); MAMONTOV, V.F. (Novokuznetsk Kemerovskoy obl.)

Apparatus for welding flanges. Stroi. truboprov. 8 no.6:30 Je '63. (MIRA 16:7)

1. Starshiy inzh. stroitel'nogo upravleniya Santekhstroy tresta Vostokgidrospetsstroy (for Tkach). 2. Glavnyy svarshchik stroitel'nogo upravleniya Santekhstroy tresta Vostokgidrospetsstroy (for Mamontov).
(Pipe flanges—Welding)

MAMONTOV, V.G., inzhener.

Hydraulic equipment for track maintenance. Zhel.dor.transp. 37 no.7:60-64 Jl '56. (MLRA 9:8)
(Railroads--Equipment and supplies)

MAMONTOV, V.G., inzhener.

Spaced snow fences. Put' i put. khoz. no.2:8 F '57. (MLRA 10:4)
(Railroads--Snow protection and removal)

MAMONTOV

VASIL'YEVA, N.F., inzhener; MAMONTOV, L.G., inzhener.

Cranes for unloading ties. Put.i put.khoz. no.4:13-14 '57.
(MLRA 10:5)

(Railroads--Ties)

MAMONTOV, Viktor Georgiyevich, inzh.; PROVODINA, M.N., inzh., red.; MEDVEDEVA, M.A., tekhn.red.

[New mechanisms for track maintenance; suggestions made by D.D.Matveenko, Hero of Socialist Labor and mechanic of the Moldavian Railroad's Bendery section] Novye putevye mekhanizmy; opyt slesaria Benderskoi distantsii puti Moldavskoi dorogi, Geroia Sotsialisticheskogo Truda D.D.Matveenko. Moskva, Vses.izdatel'sko-poligr.ob"edinenie M-va putei soobshcheniia, 1960. 33 p. (MIRA 13:9)
(Railroads--Maintenance and repair)

KRAYNOV, I. I., dorozhnyy master; MAMONTOV, V. G., inzh.

Fastenings with dowel bolts for reinforced concrete ties. Put' i put. khoz. 6 no.9:15-17 '62. (MIRA 15:10)

(Railroads--Rails--Fastenings)

BOGDANOV, Aleksey Vyacheslavovich; SLUTSKIN, Grigoriy Solomonovich; MAMONTOV, V.G., inzh., retsenzent; VICHEREVIN, A.Ye., inzh., red.; DROZDOVA, N.D., tekhn. red.

[Prolonging the life of elements of the superstructure] Prodlenie sroka sluzhby elementov verkhnego stroeniia puti; iz opyta raboty peredovykh kollektivov. Moskva, Transzheldorizdat, 1963. (MIRA 16:5)
ro p.
(Railroads--Maintenance and repair)

MAMONTOV, V.G., inzh., otv. za vypusk; SERGEYEVA, A.I., red. izd-va; USENKO, L.A., tekhn. red.

[Specifications for the laying and maintenance of continuous rail tracks] Tekhnicheskie usloviia na ukladku i soderzhanie besstykovogo puti. Moskva, Transzheldorizdat, 1963. 81 p. (MIRA 16:5)

1. Russia (1923- U.S.S.R.) Glavnoye upravleniye puti i sooruzheniy. (Railroads--Track)
(Railroad engineering--Tables, calculations, etc.)

SLAVIKOVSKIY, N.A.; BARANOV, G.G.; MAMONTOV, V.G., inzh.

Improving the relieving of temperature stresses. Put' i put.khoz. 7 no.4:17-18 '63. (MIRA 16:3)

1. Moskovsko-Kurskaya distantsiya Moskovskoy dorogi.
(Railroads—Rails)

MAMONTOV, V.G., inzh.

New type of rail chairs. Put' i put. khoz. 7 no.5:19 '63.
(MIRA 16:7)

(Railroads—Rails)

MAMONTOV, V.G., inzh.

Equipment parts made from polyethylene. Put' i put. khoz. 8 no.7:13 '64. (MIRA 17:10)

MAMONTOV, V. K.

Work [illegible] underwater hydraulic engineering [illegible]. Moskva, Izd-vo Ministerstva rechnogo flota SSSR, [illegible]. 168 p. [illegible]

TC[illegible]

KOGAN, L.A.; MAMONTOV, V.N.

Seismic effect of blasting. Trudy Inst. seism. stroi. i seism. 11: 96-107 '62. (MIRA 16:5)

(Blasting) (Shock waves)

L 37654-65 EWA(h)/EWT(l) Peb GW

ACCESSION NR: AR5008607 S/0169/65/000/001/G015/G016 20 B

SOURCE: Ref. zh. Geofizika, Abs. 1G73

AUTHOR: Kukhtikova, T. I.; Kozlov, A. V.; Mamontov, V. N.; Frantsuzova, V. I.; Prikhod'ko, L. V.

TITLE: Working characteristics of seismographs of some stations in Central Asia

CITED SOURCE: Tr. In-t seysmostoyk. str-va i seysmol. AN TadzhSSR, v. 12, 1964, 133-195

TOPIC TAGS: seismology, seismograph

TRANSLATION: Some shortcomings in the determination of the parameters of the seismic apparatus of the network of seismic stations are noted. There was found to be a wide diversity in the parameters for the stations of Central Asia. The bulletins giving seismograph parameters nowhere indicate the accuracy of their determination. Using the examples of the SK and VEGIK seismographs, it is shown that knowledge of the accuracy of determination of the parameters plays an important role in determinations of their dynamic characteristics. For example, a 10% error in determination of the parameters can cause an error in the determination of magnification of 1/2 up to 30%. The "Byulleten' seysmicheskoy seti SSR" contains some data

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L 37654-65

ACCESSION NR: AR5006607

on the parameters of seismic apparatus. These data are given in a form quite unsuitable for computation of the dynamic characteristics in a broad range of frequencies. It is extremely irrational for the computation of the characteristics to be left to each interpreter. It is proposed that apparatus data be published in the form of detailed tables. Such work already has been done for 14 stations of the general type in Central Asia for the period 1955-1959 and for the expeditionary stations of Tadzhikistan for 1955-1962. Computed data are presented in tables. A. Rykov

SUB CODE: ES ENCL: 00

Card 2/2

MAMONTOV, V.P.; GRISHCHENKO, S.S., redaktor; MINYAYEVA, G.A., redaktor; KRICHEVSKAYA, L.M., tekhnicheskiy redaktor

[Organizing the production of shipyard shops for the "continuous-position" system of shipbuilding] Organizatsiia proizvodstva stapel'nogo tsekha pri potochno-pozitsionnom metode postroiki sudov. [Leningrad] Gos. izd-vo sudostroit. lit-ry, 1952. 126 p. [Microfilm]. (MLRA 8:7)

(Shipbuilding)

FILIN, N.A.; ZYKOV, A.M.; [illegible]

Kinetics of sulfurizing nickel and cobalt by sodium sulfate in presence of carbon. Trudy [illegible]

L 16811-66 EWT(1) SCTB DD

ACC NR: AT6003903 SOURCE CODE: UR/2865/65/004/000/0646/0654

AUTHOR: Antsyshkina, L. M.; Kirilenko, N. S.; Mamontov, V. Ya.; Mel'nikov, G. B.; Ryabov, F. P.

ORG: none

5D
B+1

TITLE: Experiment on fish kept in hermetically sealed aquariums with and without *Chlorella*

SOURCE: AN SSSR. Otdeleniye biologicheskih nauk. Problemy kosmicheskoy biologii, v. 4, 1965, 646-654

TOPIC TAGS: algae, Chlorella, photosynthesis, oxygen, closed ecology system, carbon dioxide

ABSTRACT: Two series of experiments were performed with crucian carp and algae to determine the survival time of the fish. In the first series, the aquarium was divided into two compartments by a partition 6 cm from the top. One compartment (8 liter capacity) contained *Chlorella pyrenoidosa*-82 while the other (16 liter capacity) contained the fish. Both were connected by an air cushion through which the gases diffused in two directions. The fish were supplied with oxygen released by

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L 16811-66
ACC NR: AT6003903

the algae during photosynthesis. In the second series of experiments, the fish were exposed to *Chlorella vulgaris*-25 which served both as a source of oxygen and as food. There was no air cushion. Analysis of the results of the first series of experiments showed that during the first 48 hours oxygen and carbon dioxide contents decreased, but thereafter the oxygen content rose considerably and remained at that level until the end of the experiment. The fish lived 39-49 days. In the second series of experiments, without an air cushion, the oxygen content decreased sharply due to the low level of chlorella photosynthesis and the fish survived only 11-37 days. The weak photosynthetic activity was ascribed to the insufficiency of light resulting from the energetic multiplication of the algae and to the inadequate supply of carbon dioxide. Orig. art. has: 3 tables.

SUB CODE: 06/ SUBM DATE: 00/ ORIG REF/ 000/ OTH REF: 000

Card 2/2 mt

MAMONTOV, Vladimir Yakovlevich; VETYUKOV, I.A., red.; SOKOLOVA, S.I., tekhn.red.

[N.E.Vvedenskii, physiologist; philosophy, and sociopolitical and scientific activity] Fiziolog N.E.Vvedenskii; mirovozzrenie, obshchestvenno-politicheskaia i nauchnaia deiatel'nost'. Pod red.I.A.Vetiukova. Vologda, Vologodskoe knizhnoe izd-vo, 1960. 100 p. (MIRA 13:12)
(Vvedenskii, Nikolai Evgen'evich, 1852-1922)

[illegible], Ye. A.

"X-ray analysis [illegible] ." Cand Phys-Mat Sci, [illegible] , [illegible] . (KhZhFiz, Feb 5[illegible])

SO: Sum. No. 631, 26 Aug 55 - Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (14)

MAMONTOV, Ye. A.

USSR/Solid State Physics - Structure of Deformable Materials, E-8

Abst Journal: Referat Zhur - Fizika, No 12, 1956, 34808

Author: Terminasov, Yu. S., Anosova, K. I., Mamontov, Ye. A.

Institution: None

Title: X-Ray Diffraction Investigation of the Mechanism of Damage of Ferrous and Nonferrous Metals by Fatigue

Original Periodical: Uch. zap. Leningr. gos. ped. in-t., 1955, 3, 176-179

Abstract: An x-ray diffraction determination was made of the crytallite stresses and distortions of the atomic lattice of specimens of steel of 3 different grades, and also of brass, phosphor bronze, and red copper. The criterion for fatigue to stresses of the III kind, established previously by Terminasov, were confirmed for the 30 and U-10 grade steels. It was observed that in the case of a steel specimen with a chromium coating the fatigue crack originates in the inside layers of the coating, and the outer layers are damaged only in the final fracture. For specimens made of nonferrous metals one observes an increase in the stresses of the II and III kind with increasing number of cycles. The generality of the laws characterizing the fatigue processes in various metals has been established.

- 1 -

1 of 1

МАМОНТОВ, Ye. A.

124-1957-10-12249

Translation from: Referativnyy zhurnal, Mekhanika, 1957, Nr 10, p 144 (USSR)

AUTHOR: Mamontov, Ye. A.

TITLE: X-Ray Investigations on Fatigue in Steel (Rentgenograficheskoye issledovaniye ustalosti staley)

PERIODICAL: Uch. zap. Leningr. gos. ped. in-ta, 1956, Vol 125, pp 31-48

ABSTRACT: Description of the results of an X-ray investigation of U-10 steel and steel 30. The Author arrives at the conclusion that the development of secondary stresses depends on the type of material and may differ according to the properties of the material. The A. concedes that the accumulation of the tertiary stresses, as such, does not necessitate the fatigue failure of the material. The A. regards as confirmed the possibility of a fatigue-limit estimation on the basis of a sharp decline in the intensity of the interference lines (Terminasov's fatigue criterion).

I. V. Vikker

Card 1/1

137-58-2-3607

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 2, p 189 (USSR)

AUTHOR: Mamontov, Ye.A.

TITLE: X-ray Investigation of Galvanized Iron (Rentgenograficheskoye issledovaniye gal'vanicheskogo zheleza)

PERIODICAL: Uch. zap. Leningr. gos. ped. in-t im. A.I. Gertsena, 1957, Vol 140, p 59

ABSTRACT: It is shown that the properties of metals produced by electrolytical means differ significantly from the properties of the same metals produced by other methods. An electrolytic coating of metals by Fe has hitherto never been used in the field because of the low mechanical and other characteristics resulting. V.P. Moiseyeva and O.S. Popova have produced Fe coatings that are not only endowed with good mechanical properties, but are even capable of taking hardening. The paper is devoted to a study of the effect of the concentrations of organic additives and also of the annealing temperature on changes in metallic coatings and on the parameter of the crystal lattice. Changes in the parameter of the Fe coating and changes in the metallic coatings are reviewed in the light of the microhardness and the H content of the coatings. I.E.

Card 1/1

1. Iron plating--X-ray [illegible] 2. Iron coatings--Properties

MAMONTOV, Ye.A.; TERMINASOV, Yu.S.

X-ray investigation of the fatigue of steel. Izv. AN SSSR. Ser. fiz. 22 no.10:190-192 O '58. (MIRA 12:3)

1. Leningradskiy gosudarstvennyy pedagogicheskiy institut im. A.I. Gertsena.
(Steel--Fatigue) (X rays)

MAMONTOV, Ye A.

66350

18.9200, 18.7400 SOV/81-59-19-67366

Translation from: Referativnyy zhurnal. Khimiya, 1959, Nr 19, p 66 (USSR)

AUTHORS: Mamontov, Ye.A., Petrov, Yu.N.

TITLE: The Roentgenographic Investigation of Electrolytic Iron

PERIODICAL: Uch. zap. Leningr. gos. ped. in-ta im. A.I. Gertsena, 1958, Vol 141, pp 173 - 183

ABSTRACT: Distortions of class II and III in electrolytic iron have been studied in dependence on the concentration of surface-active substances in the electrolyte and the temperature of heating, as well as the structure, the hardness, and the quantity of adsorbed gases in electrolytic Fe. The introduction of sugar and glycerol into the chloride electrolyte increases the distortions of class II and III which pass through a maximum with an increase in the concentration of the additions. The maximum of the distortion of class III corresponds to the maximum of cathode polarization. The distortions of class III are the principal cause for the change in hardness of electrolytic coatings. At heating of electrolytic Fe to 300°C the distortions of class II and III increase and pass through a maximum if the initial distortions are in-

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The Roentgenographic Investigation of Electrolytic Iron

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SOV/81-59-19-67366

significant. In the case of large initial distortions, heating to 300°C has no effect on distortions and at a higher temperature the distortions decrease. The hardness of Fe precipitates changes in an analogous way. The parameter of the Fe crystal lattice does not change at heating to 300°C, at heating to 700°C it decreases and at further temperature increase it remains constant. The changes in the lattice distortions and in the microhardness of Fe precipitates with the heating temperature are explained by the elimination of adsorbed H_2 from Fe at a temperature of up to 300°C and by the elimination of H_2 from the solid solution of α-Fe, which causes additional distortions of the crystal lattice and of the hardness. The texture of electrolytic Fe is extremely imperfect.

Z. Solov'yeva

Card 2/2

82338

S/139/60/000/03/023/045
E073/E335

18.8200

AUTHOR: Mamontov, Ye.A.

TITLE: Investigation of the Thermal Fatigue of U-10 Steel and of Armco Iron

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Fizika, 1960, Nr 3, pp 130 - 132 + 1 plate (USSR)

ABSTRACT: Various authors (Refs 1-4) have shown that during thermal fatigue a change takes place in the geometric dimensions of some materials (uranium, aluminium-zinc alloys, copper-zinc alloys and others). The first part of this paper contains results of measurements of the effect of thermal fatigue on the steel U-10. The second part contains results of X-ray and metallographic investigations of the thermal fatigue of armco iron. On the basis of these and also on the basis of the results of earlier investigations (Ref 5), the author expresses his views on the most likely mechanism of thermal fatigue of steel. The U-10 steel specimens (6 mm dia, 54 mm reference length) were investigated in air under the following two sets of conditions:
1) heating and holding in a tubular furnace for 90 sec

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Investigation of the Thermal Fatigue of U-10 Steel and of Armco Iron

at the γ-phase temperature, 900 °C, followed by quenching in water (12 - 20 °C) by letting the samples fall into a water-filled container; 2) this set of conditions differed from the previous one only by the fact that the heating temperature of the specimens was 700 °C (below the A_2 point). The distance of the reference lines was measured with a comparator of an accuracy up to 5 μ. Following that, the specimens were subjected to cyclic slow heating (8 min) and cooling (16 min) in vacuum. The results seem to indicate that a repeated phase transformation which is accompanied by changes in the volume of the phases in the steel U-10 (slow heating followed by cooling in vacuum) brings about a lengthening of the specimens and a reduction in their diameter, whilst thermal stresses caused by a temperature gradient led to a reduction in their length. The second factor is predominant since in the case of the simultaneous presence of thermal stresses and phase transformations, the specimens become shorter. The

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S/139/60/000/03/023/045
E073/E335

Investigation of the Thermal Fatigue of U-10 Steel and of Armco Iron

experimental data on armco iron showed that thermal fatigue was basically similar to the mechanism found in earlier work for steel 30. Due to the high temperature gradient along the cross-section of the specimen during high-frequency heating, non-uniform expansion occurs, which results in the generation of thermal stresses which are the higher, the higher the temperature gradient. The thermal stresses lead to a breaking up of the crystallites which is apparently accompanied by the development of Type II and Type III distortions, at least in the regions which are located in the direct neighbourhood of the grain fracture. At high temperatures favourable conditions occur in intensive diffusion processes. There are 2 figures and 8 Soviet references.

ASSOCIATION: Leningradskiy gosudarstvennyy pedinstitut imeni A.I. Gertsena (Leningrad State Pedagogical Institute imeni A.I. Gertsen)

SUBMITTED: July 2, 1959

Card 3/3

MAMONTOV, Ye.A.

Diaphragms giving total internal reflection of X rays.
Zav.lab. no.4:496-497 '60. (MIRA 13:6)

1. Leningradskiy gosudarstvennyy pedagogicheskiy institut.
(X rays--Equipment and supplies)

S/139/62/000/004/014/018
E193/E383

AUTHOR: Mamontov, Ye.A.

TITLE: A study of thermal fatigue of aluminium

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Fizika, no. 4, 1962, 154 - 157

TEXT: The object of the present investigation was to study the changes in the fine structure of thermally-cycled pure aluminium. In the first series of experiments, wire specimens 0.8 mm in diameter with an average grain size of 1-2 mm were held in a molten salt bath at 420 °C for 10 sec and quenched, the resultant increase in length after 400 cycles amounting to 4.4%. In the second series of tests, discs 10 mm in diameter, 5 mm thick, with an average grain size of 0.4 mm, were heated rapidly (in about 0.2 sec) by induction heating to 350 or 500 °C and cooled in air. The following mechanism of thermal fatigue of aluminium, based on the results of both X-ray and metallographic analyses of various test pieces, was postulated. The temperature gradients set up in a thermally cycled specimen caused fragmentation of grains and mosaic blocks, the latter

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APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001032110003-0"

components being rotated at the same time by a small angle. Fragmentation of grains and blocks cannot occur without causing distortion of the crystal lattice; it has been shown, however, that all the lattice distortions are localized in regions smaller than 10^{-5} cm and that they are eliminated in the course of thermal cycling owing to intensive diffusion processes which take place at the relatively high test temperatures. The increase in length of thermally cycled specimens is evidently caused by rotation of the mosaic blocks. Thus, the mechanism of thermal fatigue of pure aluminium is basically the same as that proposed for steel 30 (Ye.A.Mamontov. Uch. zap. LGPI im. Gertsena, 148, 1958), steel У10 (U10) and armco iron (Ye.A. Mamontov, Izv. vuzov SSSR, Fizika, no. 3, 1960).

ASSOCIATION: Novosibirskiy elektrotekhnicheskiy institut (Novosibirsk Electrotechnical Institute)

SUBMITTED: May 17, 1961

L 43093-66 EWT(m)/T/EWP(t)/ETI IJP(c) JD/WB

ACC NR: AR6014384 (A,N) SOURCE CODE: UR/0137/66/000/011/I057/I057

AUTHORS: Petrov, Yu. N.; Mamontov, Ye. A.; Parsadanyan, A. S.; Vyrlan, A. I.; Stanko, A. A.; Kalmutskiy, V. S.

TITLE: Influence of thermal treatment on the electrode potential of steel

SOURCE: Ref. zh. Metallurgiya, Abs. 11I396

REF SOURCE: Sb. Materialy dokl. 1-y Nauchno-tekhn. konferentsii Kishinevsk. politekhn. in-ta k Kishinev, 1965, 86-87

TOPIC TAGS: steel, carbon steel, electrode potential / St 45 steel

ABSTRACT: On the basis of comparison of the magnitude of stationary potentials of quenched and nonquenched specimens in a working electrolyte of iron-plating solution and 30% sulfuric acid solution, it is concluded that potentials of the quenched specimens are more positive than those of the nonquenched specimens. The behavior of specimens (St 45 quenched) during anodic treatment in 30% sulfuric acid solution shows that the more intensive passivation occurs for quenched specimens. The change of the stationary potentials of quenched carbon steel towards electropositive values is explained by the presence of residual

Card 1/2 UDC: 669.14.018.26:621.78

L 43093-66

ACC NR: AR6014384

austenite.. Experience in the application of the iron-plating process shows that obtaining a strong durable surface on quenched parts is associated with greater difficulties as compared with nonquenched parts. I. Tulupova [Translation of abstract]

SUB CODE: 11

Card 2/2 nch

LAZAREV, Anatoliy Abramovich, inzh.; MITSYN, P.V., inzh.; NIKIFOROV, A.A., inzh.; ROZET, I.Ya., inzh.; MAMONTOV, Ye.V., inzh.; KOBYLYAKOV, L.M., red.; GOR'KOVA, Z.D., tekhn.red.

[Manual on the operation of S-80 and S-100 tractors] Rukovodstvo po ekspluatatsii traktorov S-80 i S-100. Pod red. E.V.Mamontova. Moskva, Gos.izd-vo sel'khoz.lit-ry, 1957. 357 p. (MIRA 11:1)
(Tractors)

MAMONTOV, Yu.N., inzh.

Diagrams to determine the efficiency of guide nozzle setting and propeller design. Sudostroenie 25 no.8:9-11 Ag '59. (MIRA 13:2)

(Ship propulsion)

BELYAK, Yu.L., kand.tekhn.nauk; MAMONTOV, Yu.N., inzh.

Operational testing of strength and losses in propulsive speed of barge tankers and diesel freighters. Trudy TSNIIRF no.40:49-68 '59. (MIRA 13:6)
(Barges--Testing) (Freighters--Testing)
(Ship propulsion--Testing)

MAMONTOV Yu. P

USSR/General Problems of Pathology - Cytotoxins. T-3

Abs Jour : Ref Zhur - Biol., No 3, 1958, 12584

Author : Mamontov, Yu.P., Chernoshtanov, A.A.

Inst : Not given

Title : The Effect of Immunization with the Antigen from Cells of the Reticule-Endothelial System on Certain Blood Indices of Rabbits.

Orig Pub : Sb. stud. naych. rabot Alma-Atinsk. zoovet. in-ta, 1956, vyp. 2, 58-62.

Abstract : After determining the Hb content, and WBC and RBC counts, the rabbits received 2,6 and 8 ml of a 2% suspension of cells from the R.E. system. With an interval of 5 days between injections; a total of 5 injections were given. It is not indicated to what species the antigen belonged. Three and 24 hours after each injection a blood study was

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Abs Jour : Ref Zhur - Biol., No 3, 1958, 12584

repeated. Immunization was accompanied by increases in Hb (the rise was, on the average, from 59.8 to 67.8% after the third injection of the antigen) and WBC count (averaged from 7000 to 9400 per cu. mm toward the end of immunization). There was no significant change in the red count.

MAKSIMOVA, A.K.

A rare case of completed extrauterine pregnancy with normal uterine pregnancy. Akush. i gin. no.6:80-81 N-D '54. (MLRA 8:2)

1. Iz rodil'nogo otdeleniya Leningradskoy bol'nitsy (glav. vrach F.V.Datsykov) Krasnodarskogo kraya.

(PREGNANCY, ESTOPIC
abdom. successful delivery of twin inf., with simultaneous normal pregn. & delivery)
(PREGNANCY, complications
uterine with simultaneous extrauterine preg., successful delivery of twins)

SMIRNOV, V.S.; KAMENSKIY, M.D.; PODPORKIN, V.G.; DUKEL'SKIY, A.I.; NEYMAN, L.R.; ZALESSKIY, A.M.; KOLTENKO, M.V.; K[illegible]DONIK, V.S.; SHCHERBACHEV, O.V.; LOMATIN, I.A.; MAKLETOVA, A.N.; FILIPPOV, S.N.; KRYUKOV, K.P.; SINELOBOV, K.S.; BOSHNYAKOVICH, A.D.; BURGSDORF, V.V.; NOVGOROLTSEV, B.P.; GOKHBERG, M.M.; STEFANOV, K.S.

Nikolai Pavlovich Vinogradov; obituary. Elektrichestvo no.10: 91-92 O '61. (MIRA 14:10)
(Vinogradov, Nikolai Pavlovich, 1886-1961)

MAMONTOVA, A.N., kand.sel'skokhozyaystvennykh nauk

Immunological heterogeneity of individual organisms of a fungus population, its origin and role in the specialization of fungi. Agrobiologia no.4:607-614 Jl-Ag '63. (MIRA 16:9)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut zashchity rasteniy, Leningrad.

(Fungi)
(Antigens and Antibodies)

MAMONTOVA, A. N.

Mamontova, A. N. "Serological Method of Identification of Leaf Roll of Potatoes," in Virus Diseases of Plants and Measures for their Control, Works of the Conference on Virus Diseases of Plants 1940, Publishing House of the Academy of Science USSR, Moscow, 1941, pp. 316-320. 464.32 So8

So: SIRA SI - 90-53, 15 Dec., 1953

MAMONTOVA, A. N.

Mamontova, A. N. "Qualitative Changes in the Protein Complex of Fungi in Relation to Culture Media (Experiments with Ascochyta pisi and Colletotrichum linicolum)," Zhurnal Obshchei Biologii, no. 11, 1953, pp. 462-464. 442.8 Z6

So: SIRA SI - 90-53, 15 Dec., 1953

MAMONTOVA, A. N.

"The Effect of Grafting on Qualitative Changes of Proteins of the Graft and Stock,"

SO: Dok. An., 70, No. 5, 1950.

Mbr., All-Union Sci. Res. Inst. Plant Protection, Leningrad, -c1950-.

MAMONTOVA, A. N.

Мамонтова (Mme A. N.). Получение высокоактивных антигрибных сывороток. [Obtaining highly active antifungal sera.]—Микробиология [*Microbiology, Moscow*], 21, 2, pp. 200–204, 1952.

The results of experiments at the Pan-Soviet Scientific Research Institute for Plant Protection, Leningrad, indicated that in attempting to obtain highly active antifungal sera [*cf. R.A.M.*, 18, p. 162] with one and the same method of immunization of [unspecified] animals, i.e., by introducing internally a spore suspension of wheat loose smut (*Ustilago tritici*) [31, p. 11; 33, p. 20], the spores having previously germinated, the amount of globulin introduced into the animal plays a fundamental part. When the number of *U. tritici* spores introduced is increased the strength of the sera obtained is also increased. A long interval between the two series of injections, however, reduces the strength. The low activity of antifungal sera is explained by the insignificant content of easily soluble globulins in fungi. Activity is increased when animals are immunized with globulin obtained from the fungus spores. The highly active sera give a positive reaction with the antigen of a susceptible wheat variety within 1 to 15 minutes and in the course of an hour it reaches its maximum intensity.

9-29-54

USSR/Biology (Agriculture) - Fungus 21 Jan 52
Diseases of Wheat

"Modification of the Parasite in the Process of Feeding on the Plant as One of the Reasons for Loss of Resistance by the Plant Variety," A. N. Mamontova

"Dok Ak Nauk SSSR" Vol LXXXII, No 3, pp 493-496

Expts on the adaptation of brown rust to different varieties of wheat showed that after living for several generations on some variety, the fungus becomes adapted to the new host by modifying its enzymatic app in such a manner that it suits the

211T12

new protein medium. Adaptation to a resistant variety is expedited if susceptible varieties of wheat, which are close in protein compn to that which is resistant, are used. When a great number of wheat varieties is planted, the fungus becomes adapted to all of them and the likelihood that it will attack new varieties is increased.

211T12

MAMONTOVA, A. N.

MAMONTOVA, A.N.

MAMONTOVA (Mme A. N.). Об устойчивости пшеницы к бурой ржавчине. [Concerning wheat resistance to brown rust.]—Агробиология [*Agrobiology, Moscow*], *1953*, 6, pp. 29–39, 3 diags., 1953.

Experiments at the Pan-Soviet Institute of Plant Protection, Leningrad, U.S.S.R., have shown that the intensity of primary infection by wheat brown rust [*Puccinia triticina*: cf. *R.A.M.*, 32, p. 551] in a particular variety and the rapidity with which the particular strain adapts itself to that variety depends on the variety itself and on those from which the strain of rust was originally taken. The nearness of relationship (in respect of immunity) between the two varieties plays a fundamental part in the adaptability changes of the fungus. Similarly, the rapidity with which a variety loses its resistance depends on how closely related it is to the surrounding, susceptible varieties, the highest and most enduring resistance coming from crosses between forms most distantly related to the varieties sown in a given region. Crossing resistant varieties with susceptible ones is not recommended as it accelerates the loss of resistance and should, therefore, be minimized. Such hybrids should be sown well away from their parent varieties. Hybrids resulting from natural pollination in the field help the adaptability of the fungus to resistant varieties. Spring appearance of rust derives from the susceptible varieties in the previous year's crop. Field rotation should limit the transit of the fungus to the resistant varieties, the resistance of the varieties selected for rotation depending on their parental history in relation to the varieties previously grown in the field.

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001032110003-0"

USSR/Plant Diseases - Diseases of Cultivated Plants. 0-3

Abs Jour : Ref Zhur - Biol., No 7, 1958, 30194

Author : Manontova, A.N.

Inst : The All-Union Institute for Plant Protection.

Title : The Role of Parasite Variability in Wheat Infection.

Orig Pub : V sb.: Vopr. metodiki selektsii pshenitsy i kukuruzy. Khar'kov, Un-t, 1957, 107-117.

Abstract : Experimental and production data on the variability of infections of wheat varieties by Puccinia triticina Erikss. With regard to genetic (immunological) considerations. Recommendations are given on the correct districting of the varieties, on the immediate introduction of hardy varieties into the large areas, the selection of parental pairs for crossing with regard to their resistance in the long-range view, etc. This study was made at the All-Union Institute for Plant Protection.

Card 1/1

MAMONTOVA, D.P., aspirant

Etiology of hemorrhagic metropathy [with summary in English]. Akush. i gin. 34 no.1:62-66 Ja-F '58. (MIRA 11:4)

1. Iz kafedry akusherstva i ginekologii (zav. - prof. I.F.Zhordanina) lechebnogo fakul'teta II Moskovskogo meditsinskogo instituta imeni N.I.Pirogova.

(MENORRHAGIA AND METRORRHAGIA, etiol. & pathogen.
NS disord. (Rus))
(NERVOUS SYSTEM, dis.
etiol. of hemorrh. metropathy (Rus))

LETOV, G.S.; LETOVA, G.I.; MAMONTOVA, E.V.

Water vole in Tuva. Izv. Irk. gos. nauch.-issl. protivochum. inst. 21:298-303 '59. (MIRA 14:1)
(TUVA AUTONOMOUS PROVINCE—WATER VOLES)

MAMONTOVA, E.V.; LETOV, G.S.

Importance of the rodents of Tuva in the epizootiology of infectious natural focus diseases. Dokl. Irk. gos. nauch.-issl. protivochum. inst. no.5:17-19 '63 (MIRA 18:1)

MAMONTOVA, L.D.

GERSHOV, M.M.; MAMONTOVA, L.D.; MATVEYEVA, T.P.; VEYSMAN, S.Ya.

Washing and dyeing wool fabrics in the same bath. Tekst. prom. 18 no.1:55-56 Ja '58. (MIRA 11:2)

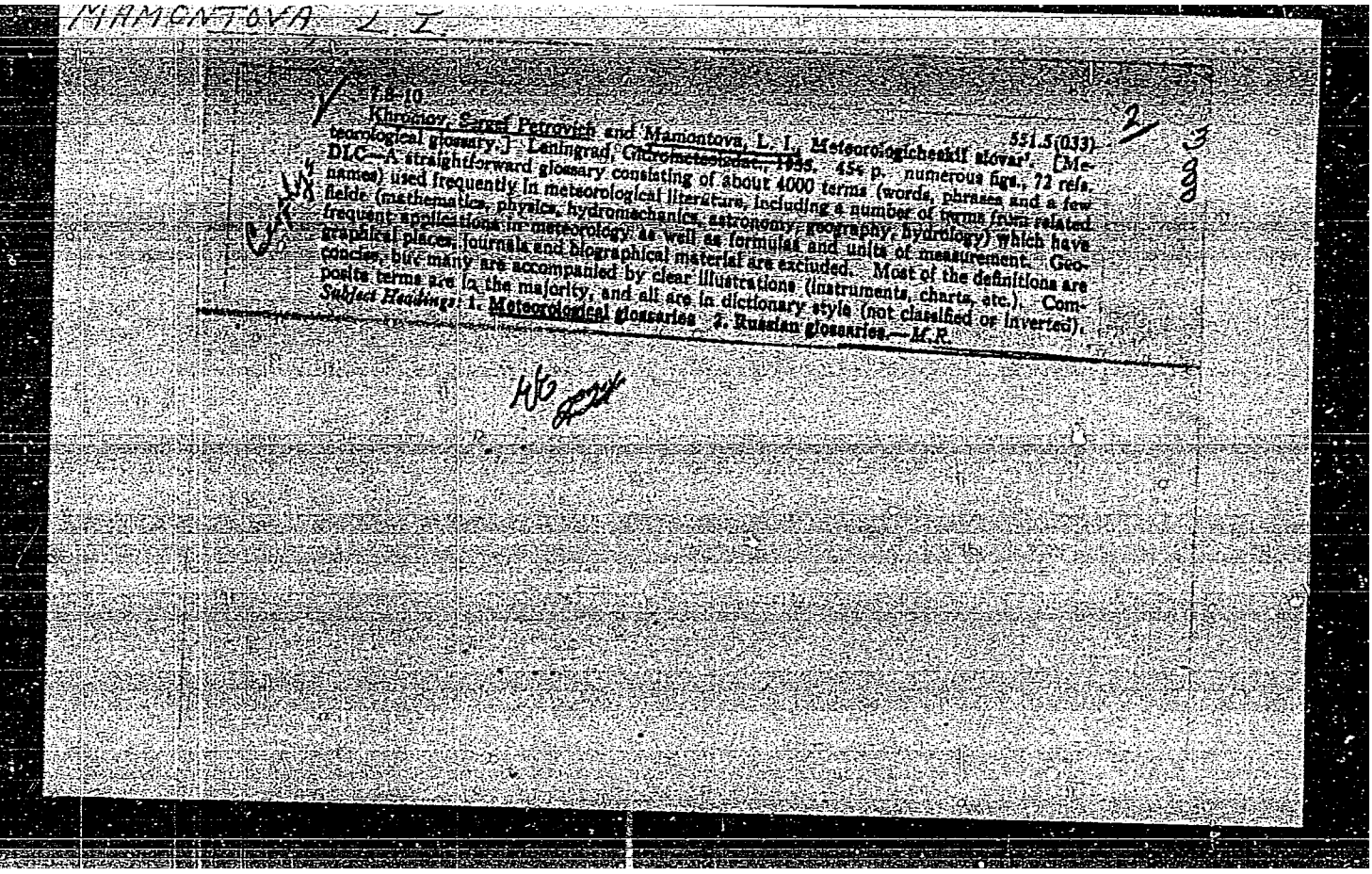
(Dyes and dyeing--Wool)

GERSHOV, M.M.; MAMONTOVA, L.D.; MATIS, V.A.; MOZHEYKO, N.N.

Using reduction-oxidation process in bleaching wool caps. Leg. prom. 18 no.2:36-37 F '58. (MIRA 11:2)
(Bleaching)

MAMONTOVA, L. I.

"Inertia of Anomaly of Mean Monthly Temperature of the Air Over the USSR," Meteorology and Hydrology, Vol. 2, 1949.



MAMONTOVA, L. I.

Khromov, Sergei Petrovich and Mamontova, L. I. *Meteorologicheskii slovar'.* [Meteorological glossary.] Leningrad, Gidrometeoizdat., 1956. 454 p. numerous figs., 72 refs. 551.5(033)

DLC—A straightforward glossary consisting of about 4000 terms (words, phrases and a few names) used frequently in meteorological literature, including a number of terms from related fields (mathematics, physics, hydromechanics, astronomy, geography, hydrology) which have frequent applications in meteorology as well as formulas and units of measurement. Geographical places, journals and biographical material are excluded. Most of the definitions are concise, but many are accompanied by clear illustrations (instruments, charts, etc.). Composite terms are in the majority, and all are in dictionary style (not classified or inverted).

Subject Headings: 1. Meteorological dictionaries 2. Russian glossaries.—*M.R.*

MAMONTOVA, L. I.

"Solar energy." K. IA. Kondrat'ev. Reviewed by L. I. Mamontova. Izv. Vses. geog. ob-va 87 no. 4:378-380 Jl-Ag'55. (MLRA 8:10)
(Solar radiation) (Kondrat'ev, K. IA.)

MAMONTOVA, Lidiya Ivanovna; KHROMOV, Sergey Petrovich; PROTOPOPOV, V.S., red.; BRAYNINA, M.I., tekhn.red.

[English-Russian meteorological dictionary] Anglo-russkii meteorologicheskii slovar'. Leningrad, Gidrometeor.izd-vo, 1959. 172 p. (MIRA 12:4)
(English language--Dictionaries--Russian)
(Meteorology--Dictionaries)

ACCESSION NR: AT4046120 S/0000/63/000/002/0075/0077

AUTHOR: Mamontova, L. I.

TITLE: Spectrochemical determination of impurities in some very pure lithium and cesium salts

SOURCE: USSR. Gosudarstvenny*y komitet khimicheskoy i neftyanoy promy*shlennosti. Promy*shlennost' khimicheskikh reaktivov i osobo chisty*kh veshchestv (Industry of chemical reagents and extra pure substances); informatsionny*y byulleten', no. 2. Moscow, IREA, 1963, 75-77

TOPIC TAGS: lithium, cesium, spectrochemical analysis, diethyldithiocarbamate, carbon electrode, ISP-22 spectrograph, heavy metal

ABSTRACT: A method has been developed for the determination of heavy metal impurities in high-purity salts (such as lithium chloride, nitrate and sulfate and cesium nitrate) at a sensitivity of 1×10^{-4}%. The salts are dissolved in water, enriched by the extraction of the diethyldithiocarbamates of copper, iron lead, maganese, tin, silver, cobalt, nickel, and antimony with ethyl acetate (at pH 5-6), and the spectra are recorded. The standard samples were prepared on a spectrally pure graphite powder, which did not contain these impurities. After chemical enrichment, the samples and standards were photographed on the ISP-22 spectrograph

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ACCESSION NR: AT4046120

with a three-lens illuminating system at 10 amperes direct current. The standard samples were placed into carbon electrodes 6 mm deep and 4.5 mm in diameter. The following lines were used: Fe-2599.4 Å, Mn-2794.81 Å, Cu-3247.5 Å, Co-3044.0 Å, Ni-3050.0 Å, Ag-3280.7 Å, Pb-2833.1 Å, Sb-2593.1 Å, Sn-2839.9 Å. The accuracy of the method was confirmed for Pb, Co, Ni, Mn and Cu in lithium sulfate, with a mean square relative deviation of 19.1%. The greatest difficulties are encountered with copper and iron because of their possible presence in the carbon electrode and in the reagents used (water and sodium diethyldithiocarbamate). Orig. art. has: 1 table and 1 formula.

ASSOCIATION: none

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Card 2/2

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[Handbook on pond fish culture] Spravochnik po prudovomu rybovodstvu. Red.kollegiia: A.I.Isaev i dr. Moskva, Pishchepromizdat, 1959. 374 p. (MIRA 13:4)

1. Moscow. Vserossiyskiy nauchno-issledovatel'skiy institut prudovogo rybnogo khozyaystva.

(Fish culture)

MAMONTOVA, L.N.

How to raise more fish in the pond. Priroda 50 no.9:104-105 S '61. (MIRA 14:8)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut prudovogo rybnogo khozyaystva (Moskva).
(Fish culture)

MAMONTOVA, L.N.

Introduction of ammonium nitrate and superphosphate as a means of enriching the natural feed supply in ponds. Trudy sov. Ikht. kom. no.14:30-32 '62. (MIRA 15:12)

1. Vserossiyskiy nauchno-issledovatel'skiy institut prudovogo rybnogo khozyaystva (VNIPRKh).
(Fishponds)
(Fertilizers and manures)

ACC NR: AP6029897 SOURCE CODE: UR/0413/66/000/015/0059/0060

INVENTOR: Leybov, E. L.; Kurochkin, Yu. M.; Avilov, V. Ye.; Zhironkin, V. F.; Sokolov, I. L.; Mamontova, L. T.

ORG: none

TITLE: Vacuum electromagnetic relay. Class 21, No. 184351

SOURCE: Izobret prom obraz tov zn, no. 15, 1966, 59-60

TOPIC TAGS: electric relay, vacuum ~~relay~~ technique

ABSTRACT: A vacuum electromagnetic relay is introduced whose coil, wound with a heat-resistant wire, such as glass wire, is placed together with a contact system in

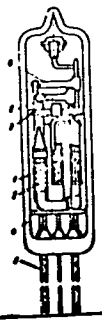

Fig. 1. Vacuum relay

1 - Coil; 2 - contact system;
3 - small leg; 4 - glass tube;
5 - armature; 6 - return spring;
7 - plate.

UDC: 621.318.56. 04-186.2

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